Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the

application.

Listing of Claims:

1. (Currently Amended) A storage system for storing an original file and at least one

format converted file of the original file comprising:

a storage media; and

a file conversion unit which, in response to a request to store an original file, is

configured to convert ~~converts~~ the original file to at least one format converted file,

wherein said storage system is configured to store ~~stores~~ the original file and

the at least one format converted file on said storage media, and is able to manage

~~manages~~ a relationship between the original file and the at least one format

converted file to permit retrieval of either of the original file and the at least one

format converted file,

wherein said file conversion unit is configured to calculate ~~calculates~~ a first

hash value of the original file and a second hash value for each of the at least one

format converted files, and

wherein said storage system is configured to determine whether the original

file has changed or whether the at least one format converted file has changed by

reading one of said files, calculating a new hash value for the read file, and

comparing said new hash value with a respective one of said first hash value if said

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original file is read, or a corresponding second hash value if one of said format

converted files is read~~said first hash value is used to determine whether the original~~

~~file has changed and/or said second hash value is used to determine whether the~~

~~format converted file has changed~~.

2. (Currently Amended) A storage system according to claim 1, wherein the

relationship between the original file and the format converted file is managed by

including a first inode that includes the first hash value stored therein, said first inode

~~and that~~ further ~~includes~~ including, for each at least one format converted file, an

inode number of a second inode that stores the second hash value and that points to

a corresponding format converted file.

3. (Canceled)

4. (Original) A storage system according to claim 1, wherein said file conversion

unit is external of said storage system.

5. (Previously Presented) A storage system according to claim 1,

     wherein said first hash value is used to determine whether the original file has

changed by

reading the original file pointed to by a first inode that stores the first hash

value,

calculating a first new hash value from the original file as read, and

comparing the first hash value stored in the first inode with the first new hash

value to determine whether the original file has changed; and

wherein said second hash value is used to determine whether the format

converted file has changed by

reading a second inode listed in said first inode for said format converted file,

reading the format converted file pointed to by the second inode,

calculating a second new hash value from the format converted file as read,

and

comparing the second hash value stored in the second inode with the second

new hash value to determine whether the format converted file has changed.

6. (Previously Presented) A storage system according to claim 1, wherein a

directory list is maintained indicating a corresponding relation between the original

file, formats to which the original file has been converted, information based on hash

checks indicating whether the original file or the format converted file has changed,

and information indicating a status of the change.

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7. (Previously Presented) A storage system according to claim 1, wherein checked hash values of original files and format converted files are used to create a status table of the original files and format converted files, indicating whether the files are changed or unchanged and whether an unchanged format converted file is able to be reconverted to an original file format.

8. (Previously Presented) A storage system according to claim 1, wherein a file is able to be stored at different locations on said storage media, on other storage media, or on other storage media of a remote storage system which is able to be accessed via a network based on a format of said file or a directory in which files are located.

9. (Original) A storage system according to claim 8, wherein storing of a file based on its format is conducted based on a file storing rule.

10. (Currently Amended) A storage system according to claim 1, wherein a list of formats in which a file is stored in is able to be obtained.

11. (Currently Amended) A method of storing an original file and at least one format converted file of the original file in a storage system which includes a storage media, said method comprising the steps of:

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in response to a request to store an original file, converting the original file to at least one format converted file;

storing the original file and the at least one format converted file on the storage media;

managing a relationship between the original file and the format converted file to permit retrieval of either of the original file and the format converted file using an original inode that points to the original file, and by including in said original inode, for each said at least one format converted file, an inode number of a secondary inode corresponding to each said at least one format converted file;

calculating a first hash value of for the original file and storing said first hash value in said original inode; and

calculating a second hash value of for each said at least one the format converted file and storing each second hash value in the secondary inode corresponding to that format converted file; and

using said first hash value to determine whether the original file has changed and/or using said second hash value to determine whether the corresponding format converted file has changed.

12. (Canceled)

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13. (Previously Presented) A method according to claim 12, wherein said storage system determines whether the original file has changed or whether the format converted file has changed by reading a file pointed to by said first inode or said second inode, respectively, calculating a new hash value for the read file, and comparing said new hash value with a respective one of said first hash value or said second hash value.

14. (Original) A method according to claim 11, wherein a file conversion unit performs the converting and said file conversion unit is external of said storage system.

15. (Previously Presented) A method according to claim 11, wherein a file conversion unit performs the converting and said file conversion unit calculates the first hash value of the original file and the second hash value of the format converted file, and

wherein said first hash value is used to determine whether the original file has changed by

reading the original file pointed to by a first inode that stores the first hash value,

calculating a first new hash value from the original file as read, and

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comparing the first hash value stored in the first inode with the first new hash

value to determine whether the original file has changed; and

wherein said second hash value is used to determine whether the format

converted file has changed by

reading a second inode listed in said first inode for said format converted file,

reading the format converted file pointed to by the second inode,

calculating a second new hash value from the format converted file as read,

and

comparing the second hash value stored in the second inode with the second

new hash value to determine whether the format converted file has changed.

16. (Previously Presented) A method according to claim 11, wherein a directory list

is maintained indicating a corresponding relation between the original file, formats to

which the original file has been converted, information based on hash checks

indicating whether the original file or the format converted file has changed, and

information indicating a status of the change.

17. (Previously Presented) A method according to claim 11, wherein checked hash

values of original files and format converted files are used to create a status table of

the original files and format converted files, indicating whether the files are changed

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or unchanged and whether an unchanged format converted file is able to be

reconverted to an original file format.

18. (Previously Presented) A method according to claim 11, wherein a file is able to

be stored at different locations on said storage media or on other storage media

based on a format of said file.

19. (Original) A method according to claim 18, wherein storing of a file based on its

format is conducted based on a file storing rule.

20. (Currently Amended) A method according to claim 11, wherein a list of formats

in which a file is stored in-is able to be obtained.

21. (Currently Amended) A system comprising:

       a storage system which includes a storage media for storing files; and

       a file conversion unit, which is connected to said storage system and which in

response to a request to store an original file, is configured to convert converts the

original file to at least one format converted file,

       wherein said storage system is able to store stores the original file and the at

least one format converted file on said storage media and manages manage a

relationship between the original file and the format converted file to permit retrieval

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of either of the original file and the <u>at least one</u> format converted file by storing in a

first inode a pointer to said original file and an inode number of a second inode, said

second inode pointing to <s>said</s> <u>a corresponding</u> format converted file<u>,</u>

<u>   wherein said file conversion unit is configured to calculate a first hash value of</u>

<u>the original file and, for each at least one format converted file, a second hash value</u>

<u>corresponding to the format converted file, and</u>

<u>   wherein said first hash value is stored in said first inode, and is used to</u>

<u>determine whether the original file has changed, and</u>

<u>   wherein each said second hash value is stored in the corresponding second</u>

<u>inode, and is used to determine whether the corresponding format converted file has</u>

<u>changed</u>.

22. (Canceled)

23. (Previously Presented) A system according to claim 22, wherein said storage

system determines whether the original file has changed or whether the format

converted file has changed by reading a file pointed to by said first inode or said

second inode, respectively, calculating a new hash value for the read file, and

comparing said new hash value with a respective one of said first hash value or said

second hash value.

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24. (Original) A system according to claim 21, wherein said file conversion unit is external of said storage system.

25. (Previously Presented) A system according to claim 21, wherein said file conversion unit calculates a first hash value of the original file which is stored with said first inode and a second hash value of the format converted file which is stored with said second inode, and

wherein said first hash value is used to determine whether the original file has changed by

reading the original file pointed to by the first inode that stores the first hash value,

calculating a first new hash value from the original file as read, and

comparing the first hash value stored with the first inode with the first new hash value to determine whether the original file has changed; and

wherein said second hash value is used to determine whether the format converted file has changed by

reading the second inode whose inode number was stored in said first inode for said format converted file,

reading the format converted file pointed to by the second inode,

calculating a second new hash value from the format converted file as read, and

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comparing the second hash value stored with the second inode with the

second new hash value to determine whether the converted format file has changed.

26. (Previously Presented) A system according to claim 21, wherein a directory list

is maintained indicating a corresponding relation between the original file, formats to

which the original file has been converted, information based on hash checks

indicating whether the original file or the format converted file has changed, and

information indicating a status of the change.

27. (Previously Presented) A system according to claim 21, wherein checked hash

values of original files and format converted files are used to create a status table of

the original files and format converted files, indicating whether the files are changed

or unchanged and whether an unchanged format converted file is able to be

reconverted to an original file format.

28. (Previously Presented) A system according to claim 21, wherein a file is able to

be stored at different locations on said storage media or on other storage media

based on a format of said file.

29. (Original) A system according to claim 28, wherein storing of a file based on its

format is conducted based on a file storing rule.

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30.   (Currently Amended) A storage system according to claim 21, wherein a list

of formats in which a file is stored in is able to be obtained.